REMARKS

Claims 1-50 are pending in the present application. By this Response, claims 1, 6, 23, 28-29 and 46-47 are amended. Claims 1, 23, 28 and 47 are amended to add the phrases "wherein the elapsed time is an amount of time in attempting to answer a test question" and "wherein the alert apprises a test taker that the elapsed time is excessive for the test question." Support for this amendment is found at least on page 25, line 15, through page 26, line 13. Claims 6, 29 and 46 are amended to provide antecedent basis for the "test question" feature. Reconsideration of the claims is respectfully requested.

I.   Telephone Interview

Applicants thank Examiner Harris for the courtesies extended to Applicants' representative during the February 27, 2004 telephone interview. During the interview, Applicants' representative discussed the rejections and amendments of the independent claims. The substance of the telephone interview is summarized in the following remarks.

II.   35 U.S.C. § 112, Second Paragraph

The Office Action rejects claims 6-22, 29-45, and 46 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter, which Applicants regard as the invention. This rejection is respectfully traversed.

As to independent claims 6, 29, and 46, the Office Action states:

Claim 6 recites the limitation "the test question" in line 6. There is insufficient antecedent basis for this limitation in the claim.
Claim 29 recites the limitation "the test question" in line 8. There is insufficient antecedent basis for this limitation in the claim.
Claim 46 recites the limitation "the test question" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Office Action dated November 25, 2003, page 2.

Claims 6, 29, and 46 are amended to recite "a test question" rather than "the test question" to provide the appropriate antecedent basis for the claims. Therefore the rejection of claims 6-22, 29-45, and 46 under 35 U.S.C. § 112, second paragraph has been overcome.

III.   35 U.S.C. § 102, Alleged Anticipation Based on *Greene*

The Office Action rejects claims 6-10, 12-18, 29-33, 35-41, and 46 under 35 U.S.C. § 102(e) as being allegedly anticipated by Greene et al. (U.S. Patent Application Publication Number US 2002/0172931), hereinafter referred to as *Greene*. This rejection is respectfully traversed.

As to claims 6, 29, and 46, the Office Action states:

> Regarding Claims 6, 29, and 46, Greene discloses administering a test to a remotely located user of a client device; receiving test question timing data (e.g. time stamp information for answer input) from the client device, the test question timing data representing an elapsed time used by the remotely located user in attempting to answer the test question; and outputting the test question timing data to a proctor device (i.e. proctor workstation) such that the proctor device may monitor the elapsed time in attempting to answer the test question for the remotely located user. See p.4, [0041] and [0043]. Greene discloses a controller; and at least one interface coupled to the controller, wherein the controller administers a test to a remotely located user of a client device via the at least one interface. See claim 21. Greene discloses a computer program product. See Claim 41.

Office Action dated November 25, 2003, page 3.

Claim 6, which is representative of the other rejected independent claims 29 and 46 with regard to similarly recited subject matter, reads as follows:

> 6.   A method of monitoring a test question response time, comprising the steps of:
> administering a test to a remotely located user of a client device;
> receiving test question timing data from the client device, the test question timing data representing <u>an elapsed time used by the remotely located user in attempting to answer a test question;</u> and
> outputting the test question timing data to a proctor device such that the proctor device may monitor the elapsed time in attempting to answer the test question for the remotely located user. (emphasis added)

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). Anticipation focuses on whether a claim reads on the product or process a prior art reference discloses, not on what the reference broadly teaches. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 U.S.P.Q. 781 (Fed. Cir. 1983). Applicants respectfully submit that *Greene* does not identically show every element of the claimed invention arranged as they are in the claims. Specifically, *Greene* does not teach receiving test question timing data from the client device, the test question timing data representing <u>an elapsed time used by the remotely located user in attempting to answer a test question,</u> as recited in claim 6.

Greene is directed towards a system and method for monitoring testing environments from a remote location. Test environment data is obtained from sensor devices in the user's testing environment and forwarded to a proctor workstation. The test environment data may be recorded along with test input data from the user's client device for later use should cheating be suspected.

In the rejection of claim 6, the Office Action refers to the following portions of *Greene*:

> [0041] In addition, the testing database 450 may store an indication of the number of users to which the particular test was administered. This information may be used by a payment system to determine an amount to bill the test developer system operator for use of the test administration service of the test administration system. <u>The session timing device 460 is used to time each of the currently active sessions being administered by the test administering system. The session timing device 460 determines a currently elapsed time of the test session, compares the currently elapsed time to a total time length of the administered test, and determines whether the test should be ended based on the comparison.</u> In addition, the session timing device 460 may be used to <u>timestamp</u> video and audio data received from the client devices as well as <u>test answer input received from the client devices</u>. In this way, if a user is suspected of cheating on a test, the video, audio and input data may be correlated to determine whether an input was the result of unauthorized aide being provided to the user. (emphasis added)

[0043] In operation, a user of client device may log onto the central server by entering, for example, a universal resource locator (URL) of the test administration system central server using a web browser application in a manner generally known in the art. The user may be presented with a list of tests available and may select a test to take using an input mechanism associated with the client device and a web page downloaded to the client device, for example. Once the user selects a test to be administered, a session is established and a session id is assigned. In addition, a proctor workstation is assigned to monitor the user's testing environment while the user takes the test. The session entry is stored in the session database 440 and the test is retrieved from the testing database 450. The test is then downloaded to the user's client device via the network interface 420. The session timing device 460 is then initiated for the session and is used to time the test as well as provide time stamp information for video, audio and answer input data received from the client device. Video and/or audio input to the client device is forwarded to the central server and received by the controller 410 via the network interface 420. The video and/or audio data may then be forwarded to the proctor workstation via the workstation interface 430 and may be stored in the testing environment storage device 470. Routing of the video and/or audio data as well as storing of this data in the testing environment storage device 470 may be based on a comparison of the header information for the video and/or audio data to session information stored in the session database 440. (emphasis added)

From the above, it is clear that *Greene* teaches an elapsed time of the test session. In contrast, claim 6 recites an elapsed time used by the remotely located user in attempting to answer a test question. In *Greene*, a session timing device is used to time each of the currently active sessions being administered by the test administering system. The session timing device determines a currently elapsed time of the test session, compares the currently elapsed time to a total time length of the administered test, and determines whether the test should be ended based on the comparison.

Greene teaches that test answer input received from the client may receive a timestamp. Although *Greene* does teach a timestamp, this timestamp is not an elapsed time used by the remotely located user in attempting to answer a test question. *Greene's* timestamp data is used to correlate captured video/audio with test question answers to determine whether a user input was the result of unauthorized aide being provided. *Greene* does not teach or suggest using a timestamp to determine an elapsed time and furthermore, *Greene* does not use a timestamp to monitor an elapsed time in attempting to answer a test question for a remotely located user, as recited in claim 6.

Claim 6 recites monitoring a test question response time, which includes outputting the test question timing data to a proctor device such that the proctor device may monitor the elapsed time used in attempting to answer the test question for the remotely located user. *Greene* does not teach or suggest an elapsed time that would allow a proctor device to perform this feature. In other words, while *Greene* may teach proctor workstations being used to monitor the testing environment, there is nothing in *Greene* that teaches or even suggests that the proctor workstations are provided with test question timing data representing an elapsed time used by a remotely located user in attempting to answer a test question. To the contrary, *Greene* only teaches providing the proctor workstations with a total elapsed time for the entire session, not individual questions.

In view of the above, Applicants respectfully submit that *Greene* does not teach receiving test question timing data from the client device, the test question timing data representing <u>an elapsed time used by the remotely located user in attempting to answer a test question,</u> as recited in claim 6. Claims 29 and 46 recite similar features to claim 6 and thus, define over *Greene* for similar reasons as noted above.

In view of the above, Applicants respectfully submit that *Greene* does not teach each and every feature of independent claims 6, 29 and 46 as is required under 35 U.S.C. § 102(e). At least by virtue of their dependency on claims 6 and 29, respectively, *Greene* does not teach each and every feature of dependent claims 7-10, 12-18, 30-33, and 35-41. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 6-10, 12-18, 29-33, 35-41, and 46 under 35 U.S.C. § 102(e).

Additionally, *Greene* does not teach the specific features recited in dependent claims 7-10, 12-18, 30-33, and 35-41. For example, with regard to claims 17 and 40, *Greene* does not teach monitoring the test question timing data for evidence of greater than expected response time to the test question, wherein outputting the test question time data to a proctor device is performed in response to determining that evidence of greater than expected response time to the test question is present, as recited in the claims. The Office Action alleges that this feature is taught by *Greene* in paragraph [0041], presented above. As discussed previously, *Greene* does not teach <u>an elapsed time used by the remotely located user in attempting to answer a test question.</u> *Greene* does not <u>monitor</u>

test question timing data for evidence of greater than expected response time to the test question. *Greene* monitors an elapsed time of a test session to determine if the test should be ended. *Greene* does not teach or even suggest to determine that evidence of greater than expected response time to the test question is present.

In addition, with regard to claims 18 and 41, *Greene* does not teach or suggest the specific feature that monitoring the test question timing data for evidence of greater than expected response time to the test question includes comparing previously received test question timing data to currently received test question timing data to determine if a change in the test question timing data indicates evidence of greater than expected response time to the test question. As discussed above, *Greene* does not teach or suggest monitoring the test question timing data for evidence of greater than expected response time to the test question. To the contrary, *Greene* only teaches monitoring the timing data for the entire session. Thus, *Greene* cannot teach monitoring test question timing data for evidence of greater than expected response time, and furthermore, cannot teach the specific mechanism of monitoring question timing data by comparing previously recited test question timing data to currently received test question timing data, as recited in claims 18 and 41.

Thus, in addition to being dependent on their respective independent claims, claims 7-10, 12-18, 30-33, and 35-41 are also distinguished over the *Greene* reference based on the specific features recited therein. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 6-10, 12-18, 29-33, and 35-41, and 46 under 35 U.S.C. § 102(e).

IV.   35 U.S.C. § 103, Alleged Obviousness Based on *Remschel* and *Turner*

The Office Action rejects claims 1-3, 23-25, 28, 34, and 47-49 under 35 U.S.C. § 103(a) as being unpatentable over *Remschel* (U.S Patent Number 6,208,832) in view of Turner et al. (U.S. Patent Number 6,633,742), hereinafter referred to as *Turner*. This rejection is respectfully traversed.

As to claims 1, 23, 28, and 47, the Office Action states:

Regarding Claims 1, 23, 28, 34, 47, and 49, Remschel discloses identifying presentation of test questions on the data processing system. See Col. 2: 17-22. Remschel discloses monitoring test question timing data in which the test question timing data represents. See Col. 2: 33-39. Remschel discloses an elapsed time since an answered question from the test question has been presented (i.e. the elapsed time since the start of the current question). See Col. 12:55-63. Remschel discloses a bus system (i.e. connecting cable) and a communications unit connected to the bus system (i.e. communication router). See FIG. 1. Memory including a set of instructions would have been an inherent feature of Remschel's invention.

Remschel does not disclose expressly generating an alert (i.e. notifying the user) after the test question timing data exceeds a threshold. However, Turner teaches generating an alert after timing data exceeds a threshold in Col. 21: 8-12. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate into the method and system of Remschel generating an alert after the test question timing data exceeds a threshold, in light of the teaching of Turner, in order to display a graphic user interface.

Office Action dated November 25, 2003, pages 7-8.

As amended, claim 1, which is representative of the other rejected independent claims 23, 28, and 47 with regard to similarly recited subject matter, reads as follows:

1.   A method for monitoring responses to test questions presented in a data processing system, the method comprising the computer implemented steps of:
        identifying presentation of the test questions on the data processing system;
        responsive to the presentation of the test questions on the data processing system, monitoring test question timing data in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented, wherein the elapsed time is an amount of time in attempting to answer a test question; and
        generating an alert after the test question timing data exceeds a threshold, wherein the alert apprises a test taker that the elapsed time is excessive for the test question. (emphasis added)

Neither *Remschel* nor *Turner*, either alone or in combination, teach or suggest generating an alert after the test question timing data exceeds a threshold, wherein the alert apprises a test taker that the elapsed time is excessive for a test question and wherein the elapsed time is an amount of time in attempting to answer a test question. *Remschel* is directed to a learning system in which the test taking process is automated and includes a response analyzer. As stated in the Office Action (page 7), *Remschel* does not disclose generating an alert after the test question timing data exceeds a threshold, wherein the

alert apprises a test taker that the elapsed time in attempting to answer a test question is excessive for the test question. However, The Office Action alleges that this feature is taught by *Turner* at column 21, lines 8-12, which read as follows:

> In one embodiment, the system 100 tracks <u>the elapsed time since a user has been certified in a particular task</u>. When the elapsed time exceeds a pre-defined threshold, the user is notified that they should return to the Learn working mode to be re-evaluated for re-certification. (emphasis added)

Turner is directed to a system for facilitating access and presentation of information to a user. The system provides training and documentation with an integrated presentation of knowledge that adapts to the needs of the user based on a proficiency level of the user, a working mode (such as learn, perform, or browse), and a sub-topic. For example, a user may be presented information, which aids in learning about creating a web page tailored to an intermediate level of proficiency. The portion of *Turner* cited by the Office Action only teaches notifying a user when a re-certification process should be performed. In other words, *Turner* is concerned with notifying a user when his certification for a particular task expires. *Turner* does not teach or suggest generating an alert after <u>test question</u> timing data exceeds a threshold, wherein the alert apprises a test taker that the elapsed time <u>in attempting to answer a test question</u> is excessive for the <u>test question</u>.

Furthermore, a task is not a test question. The following portion of *Turner* describes a "task":

> Many tasks are often complicated and comprise several smaller tasks or sub-tasks. Each sub-task may further comprise several steps to complete. The Perform working mode automates the selection of tasks so that the user does not have to manually select all of the sub-tasks for a given task. The Perform mode further allows the selection of multiple tasks, automatically sequences those tasks in a proper order and removes redundant sub-tasks. <u>The Perform working mode classifies the tasks as installation, maintenance, troubleshooting or replacement tasks</u>. Alternately, other classifications may be used in addition or in place of these classifications. <u>Troubleshooting tasks, for example, may include tasks for diagnosing defects and malfunctions within the associated product or process</u>, whether latent, patent or user induced. (emphasis added)

Turner, column 19, line 60 through column 20, line 7.

In *Turner*, a task comprises several smaller tasks or sub-tasks and each sub-task may further comprise several steps to complete. *Turner* teaches that the tasks may be

classified as installation, maintenance, troubleshooting, or replacement tasks. Thus, a task is not a specific test question.

Turner does not even mention <u>test question</u> timing data and is not directed to monitoring when a user spends too much time answering a <u>test question</u>, as in the presently claimed invention. Certification, in the context of *Turner*, refers to certifying a user's comprehension of the subject matter presented and issuing or printing an accreditation, such as a certificate, acknowledging the user's proficiency and is not related to time spent answering a question on a test.

Moreover, there is no teaching or suggestion in either of *Remschel* or *Turner* regarding the desirability of combining these two systems in the manner alleged by the Office Action. The timing data in *Remschel* is used to determine when to close a question of a test to a plurality of students. The timing data in *Turner* is used to determine when a particular user needs to resume a certification process. There is no teaching or suggestion in *Remschel* to the effect that it would be desirable to monitor to determine when a student needs to resume a certification process. Moreover, there is no teaching or suggestion in *Turner* regarding the desirability to monitor a test question time for a plurality of students to determine when to close a question. Thus, the only teaching or suggestion to even attempt to combine *Remschel* and *Turner* is obtained from Applicants' own disclosure and is completely based on a hindsight reconstruction having first had benefit of the knowledge of Applicants' claimed invention and disclosure.

Furthermore, there is no reason why one of ordinary skill in the art would modify *Turner* or the combination of *Turner* with *Remschel* to generate an alert when an amount of time for answering a question exceeds a threshold, wherein the alert apprises a test taker that the elapsed time in attempting to answer a test question is excessive for the test question. *Turner* is directed to a system in which it is determined whether a user's certification for a task has expired. *Turner* has nothing to do with elapsed times of test questions and thus, one of ordinary skill in the art, being presented only with *Remschel* and *Turner* would not determine to modify *Remschel* and *Turner* to <u>generate an alert after an elapsed time of test questions exceeds a threshold, wherein the alert apprises a test taker that the elapsed time in attempting to answer a test question is excessive for the test question.</u> To the contrary, any combination of *Remschel* and *Turner* would merely result

in a system substantially as taught by *Remschel* in which a user's information is monitored to determine if their certification has expired. Any alleged combination of *Remschel* and *Turner* still would not result in the elapsed time for answering a question being monitored with an alert being generated when it is determined that the elapsed time of a test question exceeds a threshold, wherein the alert apprises a test taker that the elapsed time in attempting to answer a test question is excessive for the test question.

Thus, neither *Remschel* nor *Turner*, either alone or in combination, teach or suggest generating an alert after the test question timing data exceeds a threshold, wherein the alert apprises a test taker that the elapsed time in attempting to answer a test question is excessive for the test question, as recited in claims 1, 23, 28 and 47. At least by virtue of their dependency on claims 1, 23, 28 and 47, respectively, neither *Remschel* nor *Turner*, either alone or in combination, teach or suggest the features of dependent claims 2-3, 24-25, 34, and 48-49. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1-3, 23-25, 28, 34, and 47-49 under 35 U.S.C. § 103(a).

In addition, with regard to claims 34, neither *Remschel* nor *Turner*, either alone or in combination, teach or suggest the specific feature wherein a controller alerts the remotely located user when the test question timing data exceeds a predetermined threshold. As discussed previously, *Remschel*, *Turner*, and the combination of *Remschel* and *Turner* do not teach or suggest alerting a remotely located user when the test question timing data exceeds a threshold.

In another example, with respect to claim 49, neither *Remschel* nor *Turner*, either alone or in combination, teach or suggest the specific feature of billing a client for monitoring the presentation of test question. Billing is not discussed by *Remschel* or by *Turner*.

Thus, in addition to being dependent on their respective independent claims, claims 2-3, 24-25, 34, and 48-49 are also distinguished over the *Remschel* and *Turner* references based on the specific features recited therein.

V.   35 U.S.C. § 103, Alleged Obviousness Based on *Remschel, Turner*, and *Walker*

The Office Action rejects claims 4-5, 26-27, and 50 under 35 U.S.C. § 103(a) as being unpatentable over *Remschel* in view of *Turner* as applied to claims 1, 23, and 47 above, and further in view of Walker et al. (U.S. Patent Number 6,093,026), hereinafter referred to as *Walker*. This rejection is respectfully traversed.

As to claims 4-5, 26-27, and 50, the Office Action states:

> Regarding Claims 4 and 26, Remschel/Turner does not disclose expressly billing a client for monitoring the presentation of test questions (i.e. billing information). However, Walker teaches such in Col.4:33-40. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate into the method and system of Remschel/Turner billing a client for monitoring the presentation of test questions, in light of the teaching of Walker, in order to charge the client for tests conducted on its behalf.
>
> Regarding Claims 5, 27, and 50, Remschel/Turner does not disclose expressly storing an identification of a number of test takers for the test; and billing a client based on the number of test takers for the test. However, Walker teaches billing a client for survey conducted on its behalf in Col.4:33-39. It is obvious that the charge to the client would have been somehow determined by the quantity of surveys administered. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill to incorporate the aforementioned limitation into the method and system of Remschel/Turner, in light of the teaching of Walker, in order to specify how the client is to be charged for test conducted on its behalf.

Office Action dated November 25, 2003, pages 8-9.

Since claims 4-5, 26-27, and 50 depend from independent claims 1, 23 and 47, respectively, the same distinctions between *Remschel* and *Turner*, and the invention recited in claims 1, 23 and 47, apply to dependent claims 4-5, 26-27, and 50. In addition, *Walker* does not provide for the deficiencies of *Remschel* and *Turner* with regard to independent claims 1, 23 and 47. As discussed in the previous Response to Office Action dated September 2, 2003, *Walker* does not teach or suggest generating an alert after the test question timing data exceeds a threshold. Thus, any alleged combination of *Walker* with *Turner* and *Remschel* still would not result in the invention recited in claims 1, 23 and 47 from which claims 4-5, 26-27, and 50 depend.

Since *Remschel, Turner,* and *Walker* do not teach or suggest these features that are present in independent claims 1, 23 and 47, the alleged combination of *Remschel,*

Turner, and *Walker* still does not teach or suggest the features of dependent claims 4-5, 26-27, and 50 at least by virtue of their dependency on independent claims 1, 23 and 47. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 4-5, 26-27, and 50 under 35 U.S.C. § 103(a).

Furthermore, *Walker* is only cited as allegedly teaching billing a client for monitoring the presentation of the test questions, as recited in claims 4 and 26, and billing a client based on the number of test takers for a test, as recited in 5, 27 and 50. While *Walker* may disclose billing information that specifies how an entity is to be charged for surveys conducted on its behalf, *Walker* does not teach any further specifics on the billing information. Thus, *Remschel*, *Turner*, and *Walker*, either alone or in combination, do not teach or suggest the specific feature of billing a client for monitoring the presentation of test questions, as recited in claims 4 and 26, or the specific feature of billing a client based on the number of test takers for the test, as recited in claims 5, 27 and 50.

VI.   35 U.S.C. § 103, Alleged Obviousness Based on *Greene*

The Office Action rejects claims 11 and 34 under 35 U.S.C. § 103(a) as being unpatentable over *Greene* in view of *Turner*. The Office Action rejects claims 19-20 and 42-43 under 35 U.S.C. § 103(a) as being unpatentable over *Greene* in view of *Agmoni* (U.S. Patent Application Publication Number 2002/0010626). The Office Action rejects claims 21 and 44 under 35 U.S.C. § 103(a) as being unpatentable over *Greene* in view of *Agmoni* as applied to claims 19 and 42 above, and further in view of *Dattatri* (U.S. Patent Application Publication Number 2002/0049815). The Office Action rejects claims 22 and 45 under 35 U.S.C. § 103(a) as being unpatentable over *Greene* in view of *Thomas* (US 5,618,182). These rejections are respectfully traversed.

Effective November 29, 1999, subject matter which was prior art under former 35 U.S.C. 103 via 35 U.S.C. 102(e) is now disqualified as prior art against the claimed invention if that subject matter and the claimed invention "were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person." This change to 35 U.S.C. 103(c) applies to all utility, design and plant patent applications filed on or after November 29, 1999, including application filed under
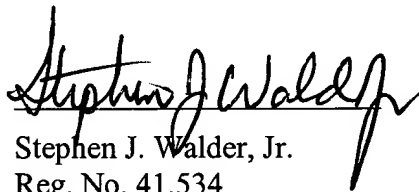
37 CFR 1.53(b), continued prosecution application filed under 37 CFR 1.53(d), and reissues. The present invention was filed on August 28, 2001. Thus, the change to 35 U.S.C. 103(c) applies to the present invention since it was filed after November 29, 1999. International Business Machines Corporation is the assignee for both *Greene* and the present application and both *Greene* and the present application are co-pending. Therefore, *Greene* cannot be used as prior art in a 35 U.S.C. 103 rejection against the presently claimed invention. Accordingly, Applicants respectfully request withdrawal of the rejections of claims 11, 19-22, 34, and 42-45 under 35 U.S.C. § 103(a).

VII.   Conclusion

It is respectfully urged that the subject application is patentable over the cited references and is now in condition for allowance. The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,

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Stephen J. Walder, Jr.
Reg. No. 41,534
Carstens, Yee & Cahoon, LLP
P.O. Box 802334
Dallas, TX 75380
(972) 367-2001
Attorney for Applicants

SJW/va